

ABSTRACT OF THE DISCLOSURE

A composition for the preventing, reducing or treating radiation dermatitis includes a mixture of one or more compounds that regulates cell differentiation and/or 5 cell proliferation, and one or more antioxidants formulated in a pharmaceutically acceptable carrier. The composition of the present invention may further include a flavonoid. A method for the topical administration of the composition in accordance with the present invention for the purpose of preventing, reducing or treating radiation dermatitis involves topically administering an effective amount of the composition of the 10 invention an area of skin which has been or will be exposed to radiation. The composition and method can be employed to prevent, reduce or treat radiation dermatitis caused by a wide variety of types of radiation exposure and is particularly useful for the prevention, reduction or treatment of radiation recall dermatitis.